



February 12, 2018

State Water Infrastructure Authority

Division of Water Infrastructure

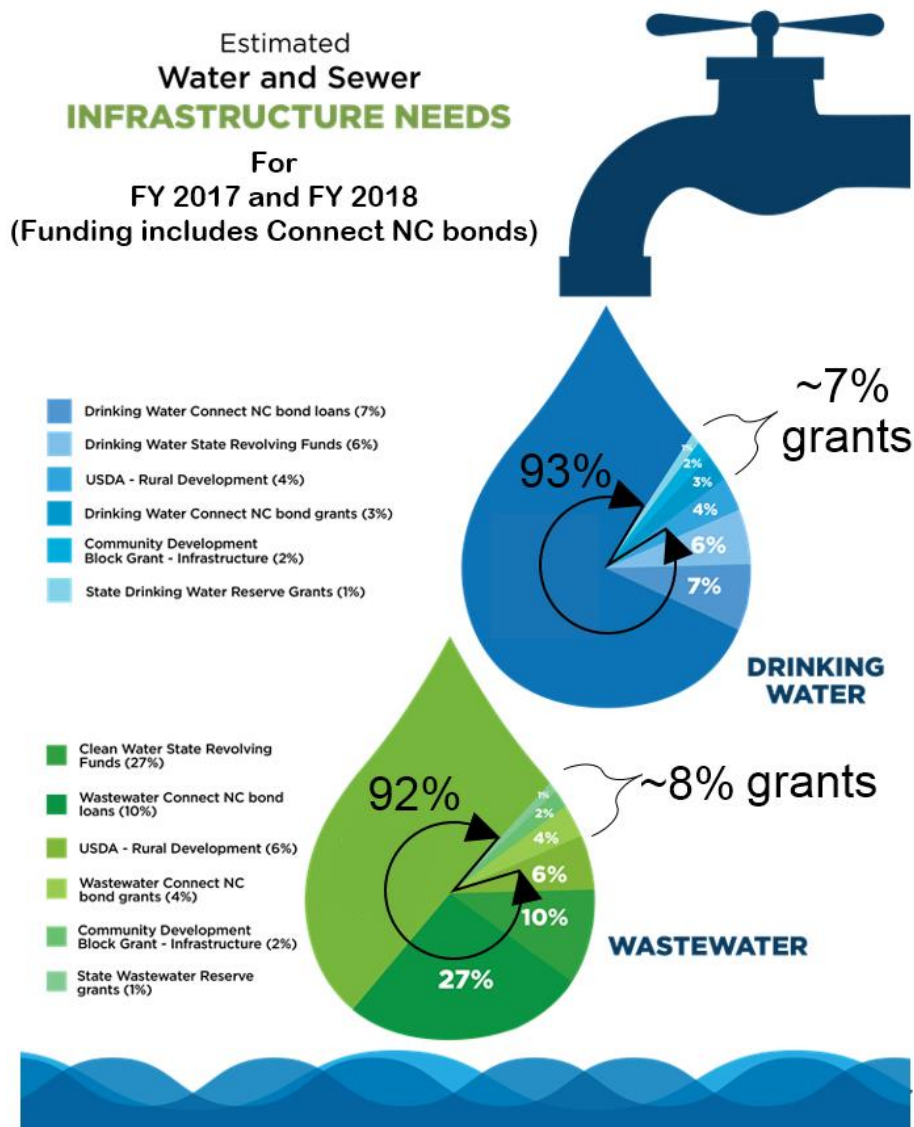
Department of Environmental Quality



Legislation in 2013

- Created Division of Water Infrastructure
- Created 9-member State Water Infrastructure Authority
 - 3 ex officio members
 - Director of the Division of Water Infrastructure, serves as Chair
 - Director of the Local Government Commission or the Director's designee
 - Secretary of Commerce or the Secretary's designee
 - 6 appointed members – qualifications and knowledge
 - Wastewater professional engineer
 - Federal water/wastewater funding
 - Urban water/wastewater systems
 - Rural water/wastewater systems
 - Rural county commissioner/resident; public health services experience
 - Water, wastewater, stormwater issues and state funding sources
 - 12 tasks

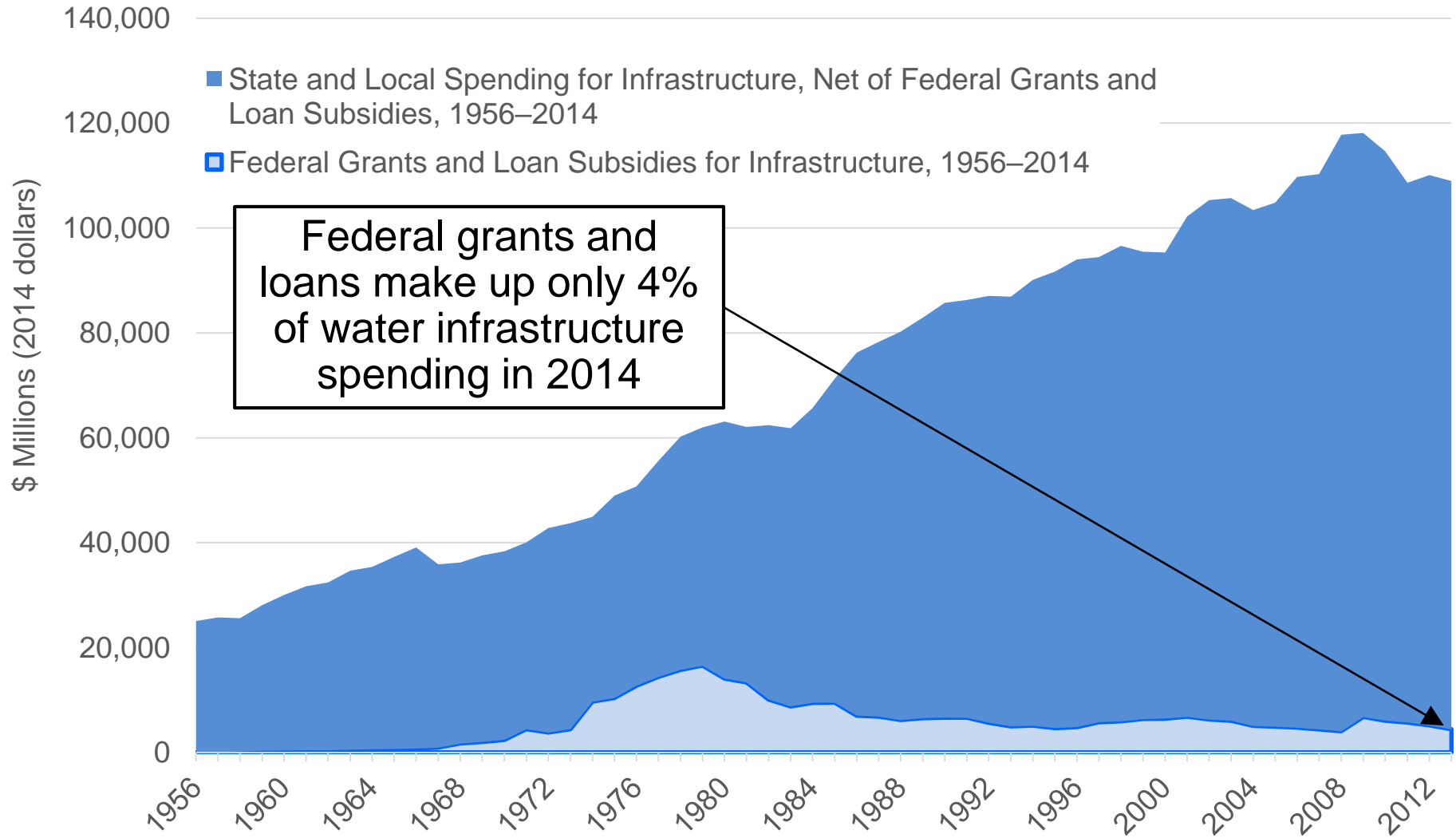
Water Infrastructure Needs



- Drinking water systems needs are \$10-\$15 billion over next 20 years*
- Wastewater systems needs are \$7-\$11 billion over next 20 years*
- For most funding sources, users pay to meet capital needs (e.g., loans, bonds, reserves, etc.)

(*) Environmental Finance Center at the University of North Carolina's School of Government (EFC) evaluation of needs surveys

Spending on Water Infrastructure, 1956 to 2014



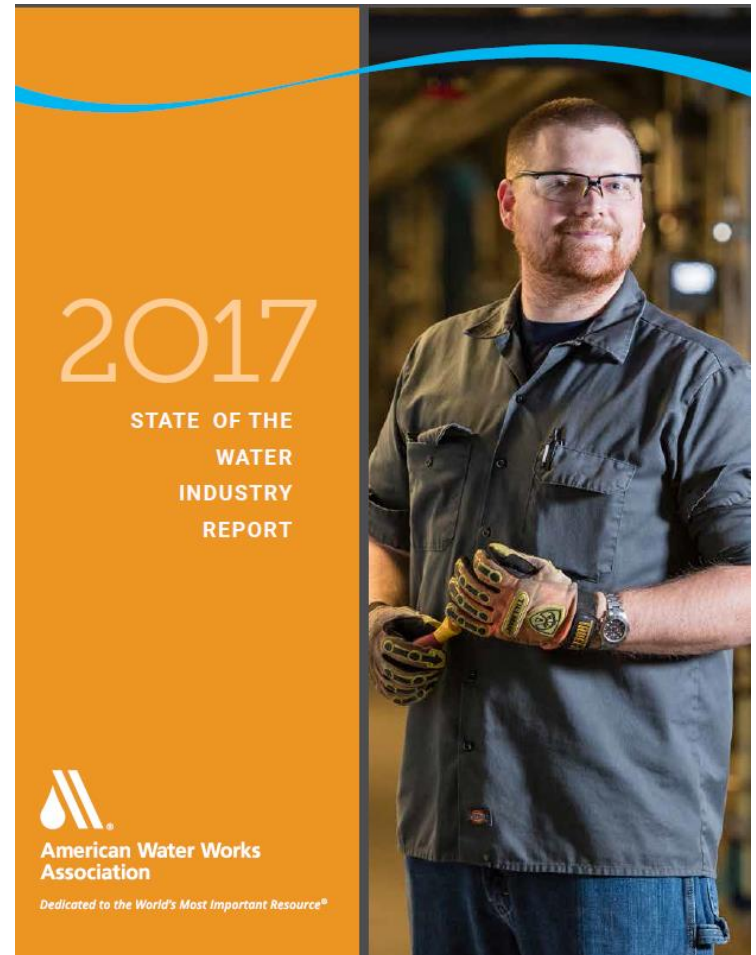
Source: CBO's March 2015 report Public Spending on Transportation and Water Infrastructure, 1956 to 2014.

AWWA's 2017 SOTWI Report

The two most important issues facing the water industry:

1. Renewal and replacement (R&R) of aging water and wastewater infrastructure (#1 in 2016)
2. Financing for capital improvements (#2 in 2016)

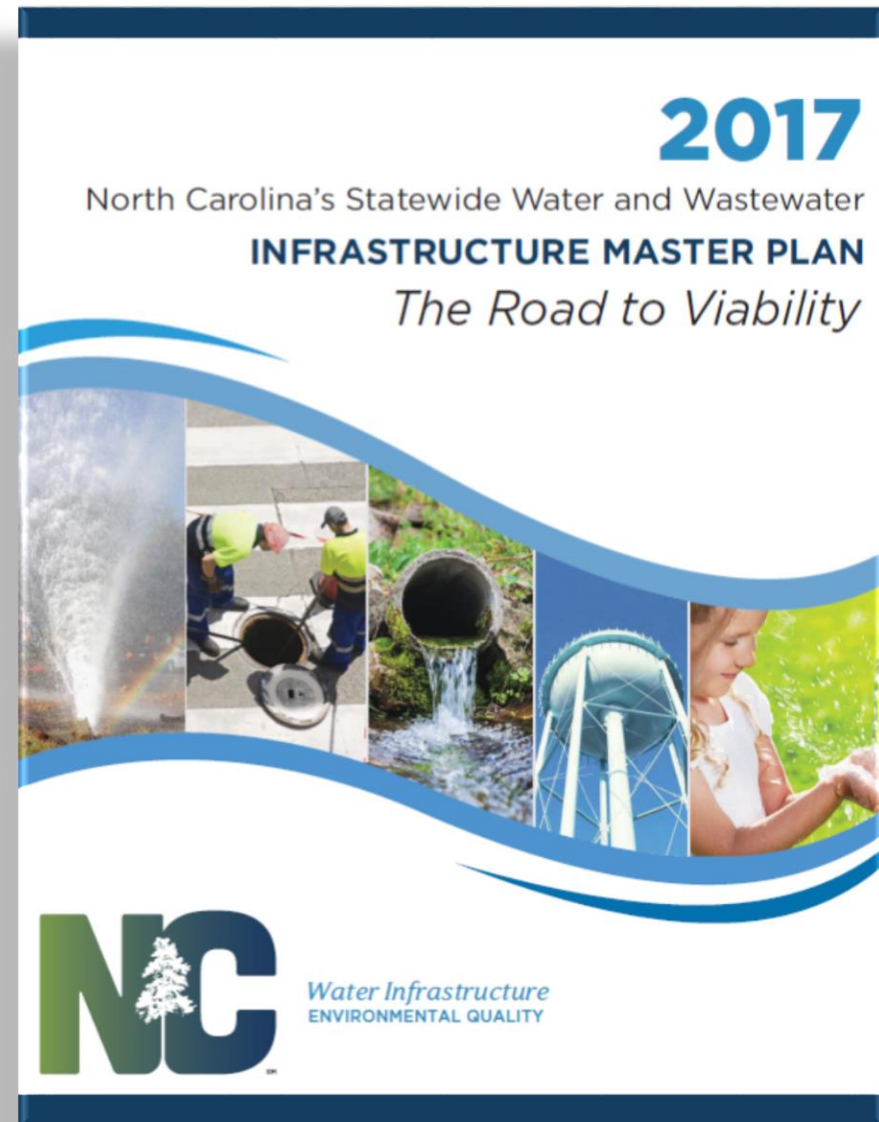
“The water industry seems to continuously face difficulty in recruiting, training, and retaining skilled employees, especially for small systems.”



Master Plan Vision

The state will best be able to meet its water infrastructure needs by ensuring individual utilities are, or are on a path to be, viable systems

A viable system is one that functions as a long-term, self-sufficient business enterprise, establishes organizational excellence, and provides appropriate levels of infrastructure maintenance, operation, and reinvestment that allow the utility to provide reliable water services now and in the future



Best Practices in Utility Management



Infrastructure management

- Proactive approaches
- Life-cycle costs
- Risk management



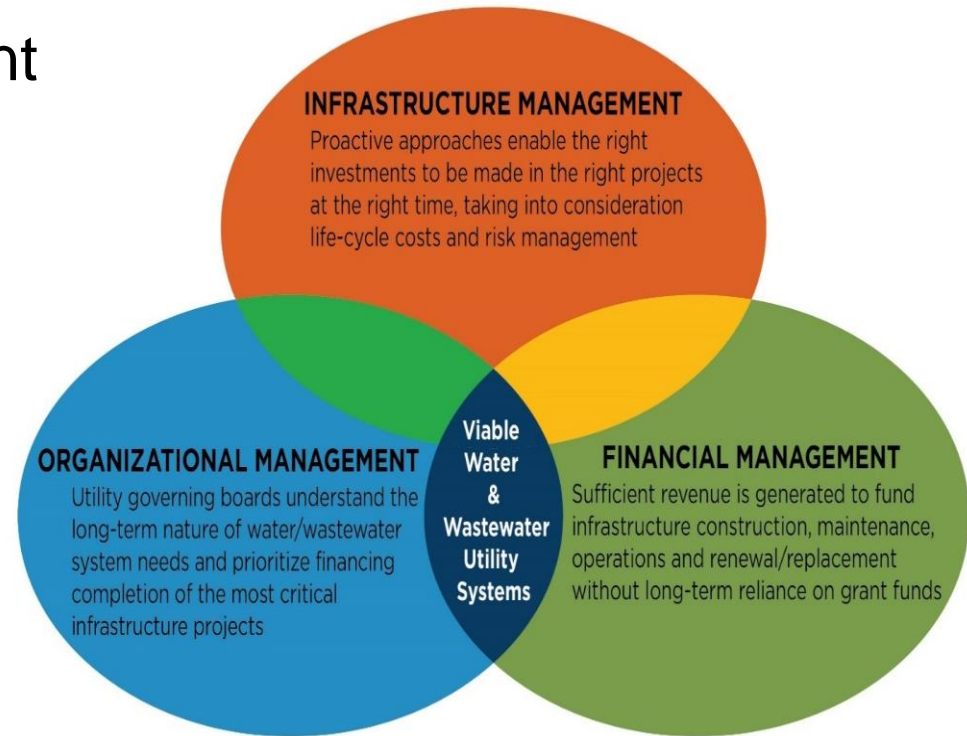
Organizational management

- Long-term nature of system needs
- Governing boards prioritize the most critical projects
- Adequate human resources



Financial management

- Sufficient revenue generation for O&M, renewal/replacement, reserves
- Permanent local funding solutions



System Management Funding Programs

- **Asset Inventory and Assessment grants**
 - Assist with costs of first steps toward asset management plans
 - Inventory – many system do not have full inventories of buried assets
 - Assessment – understand the condition of assets
 - \$150,000 maximum / 3 years
 - 107 awarded in first two offerings
 - 175 applications pending
- **Merger Regionalization Feasibility grants**
 - Assist with costs of exploring alternate organizational structures
 - \$50,000 maximum / 3 years
 - 13 awarded in first two offerings
 - 5 applications pending



Water Infrastructure Funding Programs – Looking Ahead

- **Small System Assistance – Fair Bluff, Fairmont, etc.**
 - Five small towns with regional sewer treatment but all independent utilities
 - Fair Bluff enterprise fund losing money before hurricane
 - Small customer base
 - Debt for infrastructure no longer used
- **Comprehensive assessment based on master plan**
 - Team: DWI, Local Government Commission, Environmental Finance Center, Compass Services, and HDR
 - Operation and maintenance
 - Capital cost projections
 - Organizational opportunities
- **Template for assistance to others**





Division of Water Infrastructure
<http://portal.ncdenr.org/web/wi/home>

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<http://portal.ncdenr.org/web/wi/authority>

